



11526 Sorrento Valley Rd SteA2  
San Diego Ca 92121  
Tel: 1.858.202.1401  
1.858.829.3082  
Fax: 1.858.259.5734  
Email: [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

## Data Sheet

### PDE5A

human, recombinant, N-terminal GST tag  
**Catalog #:** 60050

Formulated in: 25 mM Tris-HCl, pH 8.0,  
100 mM NaCl, 0.05% Tween-20, 50% glycerol,  
and 3 mM DTT.

Stability: >6 months at -80°C

#### References:

1. Filippi, S. et al., Endocrinology 148 (3), 1019-1029 (2007).
2. Bruder, S. et al., J. Biol. Chem. 281 (29), 19969-19976 (2006).

#### Description:

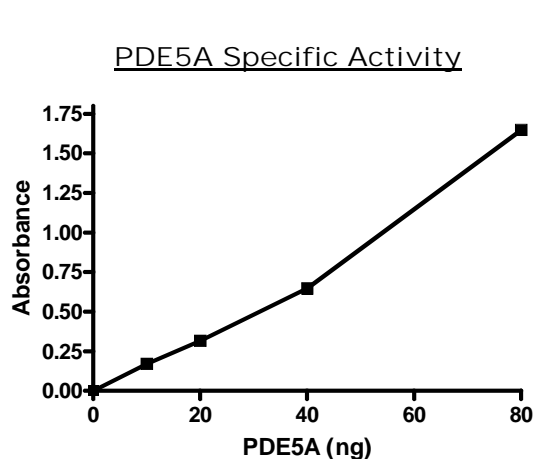
Human PDE5A (GenBank Accession No. NM\_001083), full length, with N-terminal GST tag, MW=126 kDa, expressed in a Baculovirus infected Sf9 cell expression system.

Specific Activity: 3025 pmol/min/μg.  
Assay conditions: 10 mM Tris-HCl, pH7.4,  
10 mM MgCl<sub>2</sub>, 1 mM MnCl<sub>2</sub>, 200 μM  
cGMP, 2.5 kU 5' nucleotidase, 37°C, 20 min.

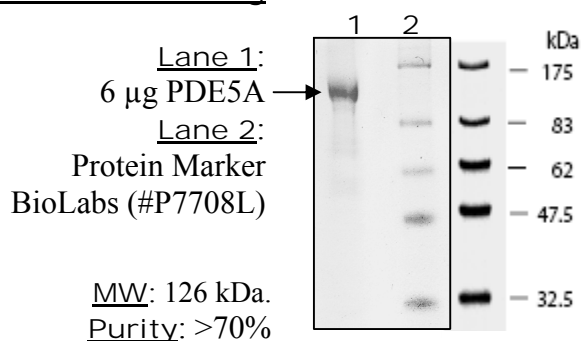
#### Application:

Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

## Quality Assurance



#### 10% SDS-PAGE Coomassie staining



OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

To place your order, please contact us by Phone **1.858.202.1401** or **1.858.829.3082**, Fax **1.858.259.5734**

Or you can Email us at: [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

Please visit our website at: [www.bpsbioscience.com](http://www.bpsbioscience.com)



11526 Sorrento Valley Rd SteA2  
San Diego Ca 92121  
Tel: 1.858.202.1401  
1.858.829.3082  
Fax: 1.858.259.5734  
Email: [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

## Assay Protocol

**Materials:** IMAP<sup>TM</sup> TR-FRET Screening Express with Progressive Binding Kit from Molecular Devices (R8160); FAM-Cyclic-3',5'-GMP from Axxora LLC (San Diego, CA); PDE5A1 (BPS Catalog Number 60050).

### **Methods:**

#### **Step 1:**

Make a series of dilution of Rolipram ranging from 300pM to 100µM in 1X PDE Assay Buffer.

Dilute FAM-cGMP to 200 nM in 1X PDE Assay Buffer.

Dilute PDE5A1 enzymes to 0.125 ng/µl in 1X PDE Assay Buffer.

#### **Step 2:**

Adding following components to a low binding black plate:

25 µl of 200 nM FAM-cGMP (Final concentration will be 100 nM)

5 µl of 1 x PDE assay buffer

20 µl of PDE5A1 (0.125 ng/µl) (Final amount=2.5 ng/reaction)

Mix and incubate at room temperature for 1 hour.

#### **Step 3:**

Prepare 1X reagent-binding buffer (75% 1X Binding Buffer A and 25% 1X Binding Buffer B).

Prepare Binding Solution by diluting Binding Reagent with 1X reagent-binding Buffer (1:600).

Add 120µl of Binding Solution to each well and incubate the plate at room temperature for 1 hour.

#### **Step 4:**

Measure fluorescence polarization at excitation of 485nm and emission of 520nm in BioTek Synergy<sup>TM</sup> 2 microplate reader.

OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

To place your order, please contact us by Phone **1.858.202.1401** or **1.858.829.3082**, Fax **1.858.259.5734**

Or you can Email us at: [info@bpsbioscience.com](mailto:info@bpsbioscience.com)

Please visit our website at: [www.bpsbioscience.com](http://www.bpsbioscience.com)